

What is claimed is:

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1. A method of manufacturing a container comprising:
a can having a top and a bottom and a heat exchange unit having
a valve cup, said heat exchange unit being positioned within the beverage can and affixed to
the bottom thereof comprising the steps of:

- a. removing a predetermined amount of material centrally from said
bottom of said can to provide an opening therethrough;
- b. forming a flange extending substantially perpendicular with respect to
said bottom from material surrounding said opening; and
- c. permanently affixing said flange to said heat exchange unit and said
valve cup.

2. A method of manufacturing a container as defined in claim 1, wherein
said removing step includes providing an anvil and a punch defining cutting edges, positioning
said beverage can with said bottom centrally disposed on said anvil and bringing said cutting
edges into contact with said bottom with sufficient force for removing said material.

3. A method of manufacturing a self-cooling beverage container as defined
in claim 1, wherein said removing step includes providing an anvil defining a bore having a
first diameter, positioning said beverage can with said bottom centrally disposed over said bore
and inserting a punch through said bottom and into said bore thereby removing said material.

4. A method of manufacturing a container as defined in claim 3, wherein
said forming step includes providing an anvil defining a bore having a first diameter and a
reentrant bore having a second diameter;

said second diameter being greater than said first diameter and a tapered
region interconnecting; said first and second bores;

providing a punch having first and second diameters separated by a tapered section said second diameter of said punch being greater than said first diameter thereof and said second diameter of said punch being less than the diameter of said counter bore of said anvil, positioning said can bottom with said opening therein centrally over said bore in said anvil and inserting said punch into said anvil such that said tapered sections of said punch contact said tapered sections of said bore.

5. A method of manufacturing a container as defined in claim 1 wherein said affixing step includes sandwiching said flange between said heat exchange unit and said valve cup.

6. A method of manufacturing a container as defined in claim 5 wherein said affixing step further includes crimping said flange, said heat exchange unit and said valve cup.

7. A method of manufacturing a container as defined in claim 5 which includes the further step of placing an elastomeric sealing material between said flange and said valve cup and between said flange and said heat exchange unit.

8. A container having a heat exchange unit therein for heating or cooling food or beverage comprising:

an outer vessel for containing said food or beverage and having a top and a bottom;

said bottom defining an opening therethrough and a flange surrounding said opening and extending away from said bottom; and

means for non-removably affixing said heat exchange unit to said flange.

9. A container as defined in claim 8 which further includes a valve cup carrying a valve, and means for non-removably affixing said valve cup to said flange.

10. A container as defined in claim 9 wherein said flange is sandwiched between said valve cup and said heat exchange unit.

11. A container as defined in claim 10 wherein said flange extends inwardly
from said bottom into said outer vessel interior.

12. A container as defined in claim 11 which further includes an elastomeric seal between said flange and said heat exchange unit and between said flange and said valve cup.

13. A container as defined in claim 9 wherein said container; said valve cup and said heat exchange unit are constructed of metal and said means for non-removably affixing includes forming those portions of said valve cup and said heat exchange unit in contact with said flange.

14. A container as defined in claim 13 wherein said forming includes crimping.

15. A container as defined in claim 10 wherein said flange extends
outwardly from said bottom away from said vessel interior.

16/ A container as defined in claim 15 wherein said flange extends
outwardly from said bottom away from said vessel interior.